

Bureau of Land Management U.S. DEPARTMENT OF THE INTERIOR

Subject:

Exploration

Selected Reference:

Table showing stages of exploration - Attachment #1.

Main Activities and Methods During Four Stages of Exploration in Search for a Porphyry Copper Deposit in Southwestern U.S.

Stage 1—Regional Appraisal	Stage 2—Detailed Reconnaissance	Stage 3—Detailed Surface Investiga- tion of Target Area	Stage 4—Detailed Three-Dimensional Physical Sampling of Target Area
O-Geologic compila- tion O-Photogeologic study (rock units and struc- ture) O-Structure analysis* F-Field inspection of area selected from air and/or on ground*	 F—Reconnaissance, gcologic mapping of outcrops* F—Stream sediment gcochemical survey F—Aeromagnetic survey F—Gravity survey in gravel-covered areas F—Reconnaissance In- duced polarization survey of covered areas 	 F—Detailed geologic* structural-alteration mapping of outcrops L—Petrographic- mineralogy-trace ele- ment study of rock samples F—Detailed induced polarization survey of anomalous covered areas 	 F—Drilling*-logging* L—Mineralogical, chemical analyses and physical tests on samples cores and cuttings* F—Down-hole gcophystical surveys L—Amenability tests on ore-grade mineralization O—Reserves computations* O—Preliminary valuation* F—Investigation of water problems and water availability for plants* F—Investigation of suitability of ground for plants F—Shaft sinking or tunneling to obtain bulk samples L—Ore dressing bulk
			L—Ore dressing bulk tests

MINING ENGINEERING, OCTOBER 1967

Please send any additional references on this subject or other minerals subjects to DSC (D-310). If the complete article or publication is needed, DSC (D-310) will attempt to obtain a copy or a loan for you.

FOR ADDITIONAL COPIES WRITE TO DIRECTOR, PORTLAND SERVICE CENTER, BOX 3861, PORTLAND, ORE., 97208

CARE IN LE PLANE COM

.

